



RESICOLOR 440

IMPREGNANT AND CONSOLIDATOR FOR POROUS BUILDING MATERIALS, BASED ON EPOXY RESINS IN WATER EMULSION

Epoxy resin in watery emulsion and amid polymer-based bi-component product. When diluted in water it forms even mixtures capable of impregnating most materials used in the building industry enhancing their waterproofing and resistance to abrasion characteristics.

Areas of use

- Anti-dust treatment of new and old cement floorings in environments where the presence of dust is harmful, i.e. in case of food storage, warehouses where items of clothing are stored, electronic industry departments, data processing premises, etc.
- Protective treatment of cement industrial flooring to enhance resistance to abrasion, waterproof the surface and make it moderately resistant to the aggression of diluted acids and bases, oils, gasoline and solvents.
- Strengthening by means of impregnation of the superficial layer of porous building materials like concrete, plaster, brick, calcareous stone, tufa, etc.

Characteristics

RESICOLOR 440 waterproofs the treated surface without creating a film because it acts by impregnation; colour is brightened up but not altered because the product does not contain any pigments.

Following treatment, the surface becomes waterproof to liquids, but it enables free transpiration of steam.

- This product can be water-diluted, it is solvent-free and it does not exhale vapours during its application resulting in reduced harmfulness for the environment and the users.
- When RESICOLOR 440 impregnation are compared with acryl or wax-based treatments, they display enhanced mechanical and chemical resistance features and last longer in time.
- RESICOLOR 440 stops the natural chalking of cement and makes periodical cleaning easier.

How to use

Preparation of the support

The support must be healthy, dry and clean and feature moderate porosity to ensure homogenous absorption of the product.

It is best to remove dust, dirt, stains of oil and any sort of deposits using high pressure water washing to avoid hindering product absorption. More specifically, stains of oil and fat can be cleaned using RESISOLV 130 or using 1:10 solution of soda and water followed by rinsing with clean water.

Wait for the surface to dry out, because RESICOLOR 440 penetrates more easily in dry supports. If oil and fats happened to have deeply impregnated the support, scarify and restore using a RESICEM series mortar.

Preparation of the support

Pour component B into component A and Blend at slow speed for 3' – 5' using drill with helix/spiral to reduce air inlet as much as possible. Slowly add clean water with continuous agitation until a white, lump-free latex is achieved.

Recommended dilution: **A+B+WATER=100+200+300 (MAX 450).**

Application

Brush, roller or low-pressure spray apply. Remove excess material in hollows and dips and let it dry out.

After 12÷24 hours apply a second layer of product using the same method.

To avoid stains and glossy areas, do not apply excess material.

Notes

Apply with temperatures between +5 and +35 °C and only on fully cured concrete.

Technical characteristics

Liquid mixture aspect	Milky white liquid
Liquid mixture density	about 1'000 kg/m ³
Mix ratio A + B (by weight)	100 + 200

The following table illustrates the reduction of the absorption coefficient by means of immersion in water for concrete cubes treated with two layers of product 1:2 water diluted as specified in the How to use section. 48 hours later the non-treated surface has absorbed water three times more than the treated surface.

To reduce absorption even more a third layer of product can be applied or water dilution can be reduced.

	Δ weight after 48 h	Δ weight after 72 h
Treated surface	+0,99%	+1,15%
Not treated surface	+3,32%	+3,36%

Tests carried out pursuant to UNI EN 13755:2002 standard (determination of absorption coefficient by means of immersion).

Use and hardening times

By pouring B component into A component, the hardening reaction starts: following mixture the time available is limited and it depends on the temperature

Due to the imbibing nature of the product, when it reaches the dry dust free condition the surface may be painted again.

Temperature	Pot life	Tack free
10° C	4 h	30 h
20 °C	2 h	24 h
30 °C	1 h	12 h

Complete hardening: 7 days at 21±2 °C.

Consumption

Consumption varied based on the porosity and waterproofing characteristics you want to achieve. For increased impregnation and waterproofing the product may be applied with different A +B + water ratio or by applying three layers instead of two with product diluted as recommended in the how to use section.

Dry shake industrial floors: 60÷80g/m² per layer of non diluted product which correspond to 180÷240 g/m² of diluted product as per recommended ratio.

Packaging and storage

Available in packages (A + B component) of 6 kg and 15 kg.

If stored in a dry and sheltered place, RESICOLOR 440 remains unaltered for 18 months when kept in its original sealed containers. Keep from freezing.

Cleaning of tools and health precautions

Before handling the product always consult the safety data sheets.

Clean tools with water.

Epoxy resins and hardening agents may cause irritations: please avoid any contact with the skin and especially with the eyes and ensure proper ventilation during use.

Wear gloves, protective suit, goggles or protective visor. People who have to work with epoxy resins for long periods are advised to use protective creams.

In case or contact with the skin, immediately clean with a cloth soaked in denatured alcohol and wash with water or neutral soap or handwash paste. Then use a nourishing cream.

In case of contact with eyes or mucosa, do not use alcohol. Rinse immediately with running water and neutral soap for 10/15 minutes, then seek medical advice.

Do not rinse with solvents

The information supplied in this sheet is the result of the best practical and laboratory experiences of RESIMIX, which guarantees its products when used according to the instructions supplied. It is nonetheless up to the customer to ensure the product is suitable for the intended use. The manufacturer declines any responsibility for incorrect use or uses beyond his control. RESIMIX reserves the right to make changes to the data. For any request, please contact the RESIMIX Technical Assistance Office.